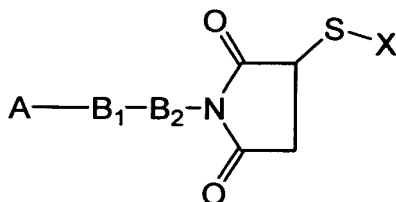


*CLAIM AMENDMENTS*

(underlines indicate insertions; strike-throughs indicate deletions)

63. (Currently Amended) A water-soluble compound of the formula



wherein:

A is a water-insoluble drug selected from the group consisting of a macrolide and an ansamacrolide;

B<sub>1</sub> and B<sub>2</sub> together are a spacer moiety,

wherein B<sub>1</sub> is selected from the group consisting of a methylenyl, an amido, -N=, an amino, and a thiol maleimido, and

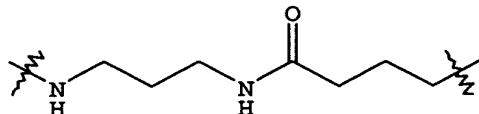
B<sub>2</sub> is selected from the group consisting of a C<sub>1</sub>-C<sub>19</sub> alkylamido, a C<sub>1</sub>-C<sub>19</sub> alkyl, a C<sub>2</sub>-C<sub>19</sub> alkenyl, a C<sub>2</sub>-C<sub>19</sub> alkynyl, a C<sub>1</sub>-C<sub>19</sub> hydroxyalkyl, a C<sub>1</sub>-C<sub>19</sub> alkyl carbamoyl, a C<sub>1</sub>-C<sub>19</sub> alkylcarbonyl, and an aralkyl, any of which can be further substituted with one or more substituents, which can be the same or different, selected from the group consisting of a nitro, a halo, an azido, a hydroxy, an amido, and an amino group; and

X is a polar moiety selected from the group consisting of an amino acid residue, a peptide residue, a polypeptide residue, and a protein residue;  
or a pharmaceutically acceptable salt of said compound.

65. (Previously Amended) The compound of claim 63, wherein

B<sub>2</sub> is selected from the group consisting of a C<sub>1</sub>-C<sub>7</sub> alkylamido, a C<sub>1</sub>-C<sub>7</sub> alkyl, a C<sub>2</sub>-C<sub>7</sub> alkenyl, a C<sub>2</sub>-C<sub>7</sub> alkynyl, a C<sub>1</sub>-C<sub>7</sub> hydroxyalkyl, a C<sub>1</sub>-C<sub>7</sub> alkyl carbamoyl, a C<sub>1</sub>-C<sub>7</sub> alkylcarbonyl, and an aralkyl, any of which can be further substituted with one or more residues, which can be the same or different, selected from the group consisting of a nitro, a halo, an azido, a hydroxy, an amido and an amino group.

66. (Original) The compound of claim 65, wherein said spacer moiety has the structure



68. (Currently Amended) The compound of claim 63, wherein said polar moiety is L-cysteine L-cysteinyl.

69. (Original) The compound of claim 63, wherein said polar moiety is ionic at neutral pH.

70. (Original) The compound of claim 69, wherein said compound is zwitterionic at neutral pH.

72. (Original) The compound of claim 63, wherein said drug is geldanamycin or a derivative thereof.

73. (Original) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of claim 63.

75. (Original) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of claim 65.

76. (Original) A pharmaceutical composition comprising a pharmaceutically acceptable carrier and a compound of claim 66.

77. (Previously Amended) A method of treating cancer in a mammal, which method comprises administering to a mammal having cancer an anticancer effective amount of a compound of claim 63, whereupon the cancer in the mammal is treated, wherein the cancer expresses heat shock protein 90 (Hsp90).

79. (Previously Amended) A method of treating cancer in a mammal, which method comprises administering to a mammal having cancer an anticancer effective

amount of a compound of claim 65, whereupon the cancer in the mammal is treated, wherein the cancer expresses Hsp90.

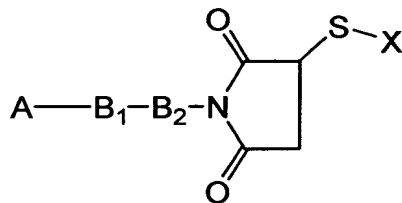
80. (Previously Amended) A method of treating cancer in a mammal, which method comprises administering to a mammal having cancer an anticancer effective amount of a compound of claim 66, whereupon the cancer in the mammal is treated, wherein the cancer expresses Hsp90.

81. (Currently Amended) A method of rendering soluble in water a water-insoluble drug, which method comprises:

(i) providing a water-insoluble drug comprising a side-chain that can react with a bifunctional linking molecule;

(ii) contacting said water-insoluble drug with said bifunctional linking molecule to obtain a first derivative comprising a maleimide side-chain; and

(iii) contacting said first derivative with a thio containing polar moiety (X-SH) to obtain a water-soluble compound of the formula



wherein:

A is a water-insoluble drug selected from the group consisting of a macrolide and an ansamacrolide;

B<sub>1</sub> and B<sub>2</sub> together are a spacer moiety,

wherein B<sub>1</sub> is selected from the group consisting of methylenyl, an amido, -N=, an amino, and a thiol maleimido, and

B<sub>2</sub> is selected from the group consisting of a C<sub>1</sub>-C<sub>19</sub> alkylamido, a C<sub>1</sub>-C<sub>19</sub> alkyl, a C<sub>2</sub>-C<sub>19</sub> alkenyl, a C<sub>2</sub>-C<sub>19</sub> alkynyl, a C<sub>1</sub>-C<sub>19</sub> hydroxyalkyl, a C<sub>1</sub>-C<sub>19</sub> alkyl carbamoyl, a C<sub>1</sub>-C<sub>19</sub> alkylcarbonyl, and an aralkyl, any of which can be further substituted with one or more residues, which can be the same or different, selected from the group consisting of a nitro, a halo, an azido, a hydroxy, an amido and an amino group; and

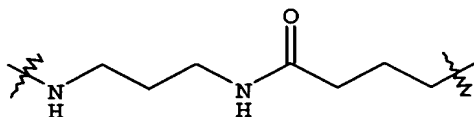
X is a polar moiety selected from the group consisting of an amino acid residue, a peptide residue, a polypeptide residue, and a protein residue;

or a pharmaceutically acceptable salt of said compound.

83. (Previously Amended) The method of claim 81, wherein

B<sub>2</sub> is selected from the group consisting of a C<sub>1</sub>-C<sub>7</sub> alkylamido, a C<sub>1</sub>-C<sub>7</sub> alkyl, a C<sub>2</sub>-C<sub>7</sub> alkenyl, a C<sub>2</sub>-C<sub>7</sub> alkynyl, a C<sub>1</sub>-C<sub>7</sub> hydroxyalkyl, a C<sub>1</sub>-C<sub>7</sub> alkyl carbamoyl, a C<sub>1</sub>-C<sub>7</sub> alkylcarbonyl, and an aralkyl, any of which can be further substituted with one or more residues, which can be the same or different, selected from the group consisting of a nitro, a halo, an azido, a hydroxy, an amido, and an amino group.

84. (Original) The method of claim 83, wherein said spacer moiety has the structure



85. (Original) The method of claim 81, wherein step (i) comprises contacting a water-insoluble drug with a modifying agent to provide a water-insoluble drug comprising a side-chain that can react with a bifunctional linking molecule.

86. (Original) The method of claim 85, wherein said water-insoluble drug comprises a methoxyaryl moiety that can react with said modifying agent, and said modifying agent comprises a primary amine, whereupon reacting said water-insoluble drug with said modifying agent, a demethoxy derivative of said water-insoluble drug comprising a portion of said modifying agent as a side chain is provided and wherein said portion of said modifying agent can react with said bifunctional linking molecule.

87. (Original) The method of claim 85, wherein said modifying agent is a diaminoalkane.

90. (Original) The method of claim 81, wherein said water-insoluble drug is geldanamycin or a derivative of geldanamycin.

91. (Original) The method of claim 81, wherein said bifunctional linking molecule is selected from the group consisting of N- $\gamma$ -maleimidobutyryloxysuccinimide ester (GMBS), sulfo-N- $\gamma$ -maleimidobutyryloxysuccinimide ester (sulfo-GMBS), *m*-

C ( maleimidobenzoyl-N-hydroxysuccinimide ester (MBS), *m*-maleimidobenzoyl-N-hydroxysulfosuccinimide ester (sulfo-MBS), succinimidyl4-*p*-maleimidophenyl]butyrate (SMPB), sulfosuccinimidyl4-*p*-maleimidophenyl]butyrate (sulfo-SMPB), succinimidyl 4-[N-maleimidomethyl]cyclohexane-1-carboxylate (SMCC), sulfosuccinimidyl 4-[N-maleimidomethyl]cyclohexane-1-carboxylate (sulfo-SMCC), 4-[N-maleimidomethyl]-cyclohexane-1-carboxylhydrazide-HCl (M2C2H), and 4-[4-maleimidophenyl]-butyric acid hydrazide-HCl (MPBH).

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